

| measurement ID | Fold Change | P-Value | GENE_SYMBOL   | GENE_NAME  |
|----------------|-------------|---------|---------------|--|
| A_55_P2095251  | 0.213       | 0.026   | Eli3          | elongation factor RNA polymerase II-like 3                                   |
| A_51_P367780   | 0.286       | 0.091   | Adamtsl2      | ADAMTS-like 2  |
| A_52_P285024   | 0.297       | 0.009   | Sertad4       | SERTA domain containing 4  |
| A_55_P1994042  | 0.301       | 0.086   | Zbp1          | Z-DNA binding protein 1  |
| A_30_P01031049 | 0.308       | 0.031   |               |  |
| A_51_P343517   | 0.336       | 0.052   | Ly6d          | lymphocyte antigen 6 complex, locus D  |
| A_51_P175580   | 0.336       | 0.063   | Trp53inp1     | transformation related protein 53 inducible nuclear protein 1                |
| A_30_P01033434 | 0.357       | 0.042   |               |  |
| A_55_P2076448  | 0.374       | 0.096   | Fam70a        | family with sequence similarity 70, member A                                 |
| A_55_P1973906  | 0.383       | 0.081   | Trp53inp1     | transformation related protein 53 inducible nuclear protein 1                |
| A_55_P2182358  | 0.389       | 0.032   | Arid3a        | AT rich interactive domain 3A (BRIGHT-like)                                  |
| A_55_P2000158  | 0.393       | 0.076   | Pik3r3        | phosphatidylinositol 3 kinase, regulatory subunit, polypeptide 3 (p55)       |
| A_55_P2031871  | 0.410       | 0.074   | Plekhh3       | pleckstrin homology domain containing, family H (with MyTH4 domain) member 3 |
| A_55_P2386236  | 0.419       | 0.100   | Ceacam2       | carcinoembryonic antigen-related cell adhesion molecule 2                    |
| A_55_P2115364  | 0.429       | 0.005   |               |  |
| A_66_P116412   | 0.430       | 0.016   | Flt3          | FMS-like tyrosine kinase 3   |
| A_55_P1979217  | 0.432       | 0.042   | Abtb1         | ankyrin repeat and BTB (POZ) domain containing 1                             |
| A_55_P1952166  | 0.435       | 0.027   | Arid3a        | AT rich interactive domain 3A (BRIGHT-like)                                  |
| A_55_P2096917  | 0.443       | 0.041   | Mreg          | melanoregulin  |
| A_55_P2108275  | 0.444       | 0.024   |               |  |
| A_52_P163939   | 0.461       | 0.038   | Cln6          | ceroid-lipofuscinosis, neuronal 6  |
| A_66_P119869   | 0.463       | 0.059   | Itln1         | intelectin 1 (galactofuranose binding)                                       |
| A_55_P2040893  | 0.465       | 0.099   | Tnni2         | troponin I, skeletal, fast 2   |
| A_55_P1967659  | 0.469       | 0.045   | Lactb         | lactamase, beta  |
| A_66_P129769   | 0.475       | 0.051   | Sik2          | salt inducible kinase 2  |
| A_55_P2063505  | 0.478       | 0.029   |               |  |
| A_55_P2069306  | 0.480       | 0.052   | Ptpn18        | protein tyrosine phosphatase, non-receptor type 18                           |
| A_55_P1987847  | 0.499       | 0.010   |               |  |
| A_30_P01028801 | 0.500       | 0.031   |               |  |
| A_55_P1965200  | 0.503       | 0.025   | Fbxl5         | F-box and leucine-rich repeat protein 5                                      |
| A_51_P429212   | 0.504       | 0.002   | Npl           | N-acetylneuraminate pyruvate lyase   |
| A_55_P2180504  | 0.504       | 0.060   | 4933413G19Rik | RIKEN cDNA 4933413G19 gene   |
| A_51_P226269   | 0.505       | 0.015   | 1190002H23Rik | RIKEN cDNA 1190002H23 gene   |
| A_55_P2056639  | 0.505       | 0.076   | Bcar1         | breast cancer anti-estrogen resistance 1                                     |
| A_55_P2155347  | 0.506       | 0.097   | Grk4          | G protein-coupled receptor kinase 4  |
| A_55_P1961135  | 0.507       | 0.067   | Atg4d         | autophagy-related 4D (yeast)   |
| A_51_P193686   | 0.511       | 0.002   | 1700012B09Rik | RIKEN cDNA 1700012B09 gene   |
| A_51_P245796   | 0.511       | 0.094   | Ddit4         | DNA-damage-inducible transcript 4  |
| A_30_P01028138 | 0.514       | 0.093   |               |  |

|                |       |       |               |   |
|----------------|-------|-------|---------------|---|
| A_55_P2084691  | 0.518 | 0.027 | Hist1h2ac     | histone cluster 1, H2ac   |
| A_55_P2121760  | 0.519 | 0.068 |               |   |
| A_55_P1981544  | 0.523 | 0.082 | Lactb         | lactamase, beta   |
| A_51_P410451   | 0.526 | 0.098 | Tube1         | epsilon-tubulin 1   |
| A_55_P1953226  | 0.529 | 0.008 | Gm14484       | predicted gene 14484  |
| A_30_P01020711 | 0.530 | 0.082 |               |   |
| A_55_P2047932  | 0.531 | 0.004 | Cyb5r4        | cytochrome b5 reductase 4                                       |
| A_55_P2124976  | 0.533 | 0.098 | Grhl1         | grainyhead-like 1 (Drosophila)                                  |
| A_52_P573727   | 0.535 | 0.091 | Rrm2b         | ribonucleotide reductase M2 B (TP53 inducible)                  |
| A_55_P2250943  | 0.535 | 0.042 | 1700024h08rik | RIKEN cDNA 1700024H08 gene                                      |
| A_55_P1959174  | 0.535 | 0.046 | Pmepa1        | prostate transmembrane protein, androgen induced 1              |
| A_51_P474701   | 0.536 | 0.087 | Fbp1          | fructose bisphosphatase 1                                       |
| A_30_P01033152 | 0.540 | 0.046 |               |   |
| A_30_P01030293 | 0.543 | 0.092 |               |   |
| A_55_P1959308  | 0.544 | 0.060 | Rbm41         | RNA binding motif protein 41                                    |
| A_51_P421664   | 0.546 | 0.081 | Tmem123       | transmembrane protein 123                                       |
| A_55_P1954302  | 0.546 | 0.069 | Esrrb         | estrogen related receptor, beta                                 |
| A_55_P2132054  | 0.548 | 0.037 |               |   |
| A_66_P124677   | 0.549 | 0.011 | Ipcef1        | interaction protein for cytohesin exchange factors 1            |
| A_55_P2153459  | 0.551 | 0.049 | Cecr2         | cat eye syndrome chromosome region, candidate 2 homolog (human) |
| A_55_P2002058  | 0.552 | 0.042 | Phf8          | PHD finger protein 8  |
| A_66_P130908   | 0.552 | 0.001 | Cyb5r4        | cytochrome b5 reductase 4                                       |
| A_30_P01032116 | 0.553 | 0.075 |               |   |
| A_30_P01021443 | 0.554 | 0.089 |               |   |
| A_55_P2138718  | 0.556 | 0.083 | Gm14483       | predicted gene 14483  |
| A_66_P101132   | 0.557 | 0.036 | Hist1h2bp     | histone cluster 1, H2bp   |
| A_30_P01021528 | 0.557 | 0.005 |               |   |
| A_52_P572613   | 0.559 | 0.033 | Fcrl6         | Fc receptor-like 6  |
| A_55_P1984243  | 0.562 | 0.016 | Naip2         | NLR family, apoptosis inhibitory protein 2                      |
| A_30_P01019604 | 0.563 | 0.091 |               |   |
| A_30_P01018614 | 0.566 | 0.072 |               |   |
| A_55_P2153762  | 0.568 | 0.057 | A630081J09Rik | RIKEN cDNA A630081J09 gene                                      |
| A_55_P2153122  | 0.570 | 0.071 | Zap70         | zeta-chain (TCR) associated protein kinase                      |
| A_66_P125327   | 0.570 | 0.061 | Ccne1         | cyclin E1   |
| A_55_P2153461  | 0.571 | 0.090 | Cecr2         | cat eye syndrome chromosome region, candidate 2 homolog (human) |
| A_30_P01026175 | 0.571 | 0.006 |               |   |
| A_55_P1981830  | 0.575 | 0.009 |               |   |
| A_52_P428673   | 0.576 | 0.096 | Usp49         | ubiquitin specific peptidase 49                                 |
| A_51_P418116   | 0.576 | 0.039 | Tmem119       | transmembrane protein 119                                       |
| A_30_P01018719 | 0.576 | 0.024 |               |   |

|                |       |       |               |   |
|----------------|-------|-------|---------------|---|
| A_55_P1984886  | 0.578 | 0.061 | Hcst          | hematopoietic cell signal transducer  |
| A_51_P312615   | 0.579 | 0.092 | Hist1h1t      | histone cluster 1, H1t  |
| A_55_P2008815  | 0.582 | 0.005 | Rrm2b         | ribonucleotide reductase M2 B (TP53 inducible)                                      |
| A_55_P2058557  | 0.582 | 0.025 | Dnajb5        | DnaJ (Hsp40) homolog, subfamily B, member 5   |
| A_52_P56634    | 0.583 | 0.056 | Map3k11       | mitogen-activated protein kinase kinase kinase 11                                   |
| A_51_P226142   | 0.583 | 0.001 | Fam116a       | family with sequence similarity 116, member A                                       |
| A_51_P453010   | 0.584 | 0.090 | Mphosph6      | M phase phosphoprotein 6  |
| A_55_P1969861  | 0.586 | 0.002 | Zap70         | zeta-chain (TCR) associated protein kinase  |
| A_55_P2137853  | 0.587 | 0.059 |               |   |
| A_52_P625321   | 0.587 | 0.012 | Cabp4         | calcium binding protein 4   |
| A_66_P103970   | 0.587 | 0.089 | Acp1          | acid phosphatase 1, soluble   |
| A_30_P01018541 | 0.589 | 0.018 |               |   |
| A_30_P01024563 | 0.592 | 0.064 |               |   |
| A_55_P2005295  | 0.595 | 0.082 |               |   |
| A_55_P1982494  | 0.597 | 0.099 | 1700012L04Rik | RIKEN cDNA 1700012L04 gene  |
| A_30_P01018337 | 0.599 | 0.045 |               |   |
| A_55_P2009121  | 0.600 | 0.050 | Agrn          | agrin   |
| A_66_P113262   | 0.601 | 0.066 | Galnt14       | UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase 14 |
| A_51_P212741   | 0.601 | 0.074 | Scn2b         | sodium channel, voltage-gated, type II, beta  |
| A_52_P417825   | 0.602 | 0.016 | Osgin2        | oxidative stress induced growth inhibitor family member 2                           |
| A_55_P2064299  | 0.602 | 0.088 | Sepx1         | selenoprotein X 1   |
| A_30_P01028885 | 0.604 | 0.079 |               |   |
| A_55_P2202598  | 0.609 | 0.082 | A930004J17Rik | RIKEN cDNA A930004J17 gene  |
| A_55_P2054511  | 0.610 | 0.093 |               |   |
| A_55_P2142937  | 0.610 | 0.050 |               |   |
| A_66_P126332   | 0.611 | 0.007 | Zfp703        | zinc finger protein 703   |
| A_30_P01025924 | 0.612 | 0.095 |               |   |
| A_51_P462972   | 0.612 | 0.025 | Mudeng        | MU-2/AP1M2 domain containing, death-inducing  |
| A_55_P2018492  | 0.614 | 0.005 | Pgap3         | post-GPI attachment to proteins 3   |
| A_52_P539434   | 0.614 | 0.002 | Lbh           | limb-bud and heart  |
| A_55_P2038203  | 0.615 | 0.067 | 4931440P22Rik | RIKEN cDNA 4931440P22 gene  |
| A_55_P1977895  | 0.617 | 0.071 | Gm5833        | predicted gene 5833   |
| A_52_P473106   | 0.618 | 0.079 | Otos          | otospiralin   |
| A_52_P613808   | 0.618 | 0.026 | Zbtb7a        | zinc finger and BTB domain containing 7a  |
| A_30_P01028831 | 0.619 | 0.013 |               |   |
| A_55_P2158006  | 0.619 | 0.078 |               |   |
| A_55_P2241299  | 0.619 | 0.040 | Otud7b        | OTU domain containing 7B  |
| A_52_P88773    | 0.619 | 0.030 | Tor2a         | torsin family 2, member A   |
| A_30_P01026391 | 0.620 | 0.095 |               |   |
| A_51_P408946   | 0.622 | 0.035 | Ccne1         | cyclin E1   |

|                |       |       |               |   |
|----------------|-------|-------|---------------|---|
| A_55_P2060752  | 0.622 | 0.084 | Usp12         | ubiquitin specific peptidase 12   |
| A_55_P2082096  | 0.626 | 0.035 | Wdr66         | WD repeat domain 66   |
| A_30_P01027047 | 0.626 | 0.012 |               |   |
| A_55_P2103837  | 0.626 | 0.066 | Gbp4          | guanylate binding protein 4   |
| A_55_P1978258  | 0.627 | 0.078 |               |   |
| A_55_P2050688  | 0.627 | 0.006 | Zbed4         | zinc finger, BED domain containing 4  |
| A_30_P01032858 | 0.627 | 0.039 |               |   |
| A_52_P510215   | 0.629 | 0.080 | Traf6         | TNF receptor-associated factor 6  |
| A_55_P2047559  | 0.629 | 0.018 | 6330503K22Rik | RIKEN cDNA 6330503K22 gene  |
| A_52_P566840   | 0.629 | 0.003 | Gpr110        | G protein-coupled receptor 110  |
| A_52_P489778   | 0.630 | 0.027 | Ablim1        | actin-binding LIM protein 1   |
| A_52_P409769   | 0.631 | 0.007 | Mrvi1         | MRV integration site 1  |
| A_30_P01032526 | 0.632 | 0.089 |               |   |
| A_51_P368009   | 0.632 | 0.094 | E2f2          | E2F transcription factor 2  |
| A_55_P2160198  | 0.632 | 0.054 | Nipa2         | non imprinted in Prader-Willi/Angelman syndrome 2 homolog (human)                 |
| A_55_P2064676  | 0.632 | 0.085 | Gas2l3        | growth arrest-specific 2 like 3   |
| A_55_P2086148  | 0.633 | 0.050 | Uhmkl1        | U2AF homology motif (UHM) kinase 1  |
| A_51_P479321   | 0.634 | 0.071 | Acss1         | acyl-CoA synthetase short-chain family member 1                                   |
| A_55_P1974283  | 0.635 | 0.078 | Rbmx          | RNA binding motif protein, X chromosome   |
| A_30_P01027966 | 0.636 | 0.086 |               |   |
| A_55_P2020366  | 0.637 | 0.048 |               |   |
| A_30_P01017669 | 0.638 | 0.051 |               |   |
| A_51_P272066   | 0.638 | 0.058 | 2010109I03Rik | RIKEN cDNA 2010109I03 gene  |
| A_66_P136955   | 0.639 | 0.017 | Med14         | mediator complex subunit 14   |
| A_55_P2162855  | 0.640 | 0.086 | Nipa2         | non imprinted in Prader-Willi/Angelman syndrome 2 homolog (human)                 |
| A_55_P2108713  | 0.641 | 0.038 |               |   |
| A_55_P2022074  | 0.641 | 0.083 | Klf10         | Kruppel-like factor 10  |
| A_55_P1970335  | 0.641 | 0.010 | Teddm1        | transmembrane epididymal protein 1  |
| A_51_P378009   | 0.642 | 0.076 | Blzf1         | basic leucine zipper nuclear factor 1   |
| A_55_P2007878  | 0.642 | 0.081 | Rnf144b       | ring finger protein 144B  |
| A_55_P2120189  | 0.643 | 0.082 | Gas2l3        | growth arrest-specific 2 like 3   |
| A_52_P183038   | 0.643 | 0.030 | Impdh1        | inosine 5'-phosphate dehydrogenase 1  |
| A_55_P2092262  | 0.643 | 0.060 | Gm7694        | predicted gene 7694   |
| A_30_P01026971 | 0.644 | 0.092 |               |   |
| A_55_P2053320  | 0.645 | 0.098 | Zfr2          | zinc finger RNA binding protein 2   |
| A_52_P136709   | 0.645 | 0.042 | Pctp          | phosphatidylcholine transfer protein  |
| A_55_P2038514  | 0.645 | 0.080 |               |   |
| A_55_P2158990  | 0.646 | 0.024 | Jun           | Jun oncogene  |
| A_55_P1955687  | 0.647 | 0.055 | Alg6          | asparagine-linked glycosylation 6 homolog (yeast, alpha-1,3,-glucosyltransferase) |
| A_30_P01018860 | 0.648 | 0.008 |               |   |

|                |       |       |               |   |
|----------------|-------|-------|---------------|---|
| A_55_P2061907  | 0.648 | 0.022 | Gm4303        | predicted gene 4303   |
| A_55_P2054280  | 0.648 | 0.011 | Fam178b       | family with sequence similarity 178, member B                                 |
| A_55_P2079457  | 0.648 | 0.074 |               |   |
| A_51_P472329   | 0.648 | 0.016 | 4632415K11Rik | RIKEN cDNA 4632415K11 gene  |
| A_55_P2440651  | 0.649 | 0.056 | Gabpb2        | GA repeat binding protein, beta 2   |
| A_30_P01020529 | 0.650 | 0.001 |               |   |
| A_30_P01029577 | 0.650 | 0.091 |               |   |
| A_30_P01027914 | 0.651 | 0.017 |               |   |
| A_30_P01020453 | 0.651 | 0.026 |               |   |
| A_30_P01032830 | 0.651 | 0.095 |               |   |
| A_55_P2030638  | 0.651 | 0.038 | Dusp23        | dual specificity phosphatase 23   |
| A_55_P2025760  | 0.652 | 0.047 | Adam9         | a disintegrin and metallopeptidase domain 9 (meltrin gamma)                   |
| A_51_P230142   | 0.652 | 0.049 | A930018P22Rik | RIKEN cDNA A930018P22 gene  |
| A_30_P01024959 | 0.652 | 0.026 |               |   |
| A_55_P2073253  | 0.652 | 0.025 |               |   |
| A_66_P123704   | 0.653 | 0.037 | Ulbp1         | UL16 binding protein 1  |
| A_55_P1955034  | 0.654 | 0.081 | Myo1c         | myosin IC   |
| A_55_P2060747  | 0.654 | 0.034 | Esco1         | establishment of cohesion 1 homolog 1 ( <i>S. cerevisiae</i> )                |
| A_55_P2169839  | 0.654 | 0.042 | Rufy3         | RUN and FYVE domain containing 3  |
| A_55_P2168451  | 0.655 | 0.024 | A930017K11Rik | RIKEN cDNA A930017K11 gene  |
| A_52_P131458   | 0.655 | 0.030 | Ttc39b        | tetratricopeptide repeat domain 39B   |
| A_51_P163694   | 0.655 | 0.005 | Rufy1         | RUN and FYVE domain containing 1  |
| A_51_P372702   | 0.656 | 0.014 | Il16          | interleukin 16  |
| A_30_P01022817 | 0.656 | 0.009 |               |   |
| A_55_P2121195  | 0.656 | 0.081 | Lcorl         | ligand dependent nuclear receptor corepressor-like                            |
| A_51_P430900   | 0.657 | 0.086 | Dusp1         | dual specificity phosphatase 1  |
| A_52_P4046     | 0.658 | 0.062 | Baz2a         | bromodomain adjacent to zinc finger domain, 2A                                |
| A_51_P503883   | 0.658 | 0.022 | Plekhg4       | pleckstrin homology domain containing, family G (with RhoGef domain) member 4 |
| A_55_P2087865  | 0.658 | 0.030 | Tinf2         | Terf1 (TRF1)-interacting nuclear factor 2                                     |
| A_30_P01027409 | 0.660 | 0.008 |               |   |
| A_30_P01019295 | 0.660 | 0.003 |               |   |
| A_55_P1954998  | 0.662 | 0.085 | Phf1          | PHD finger protein 1  |
| A_66_P119801   | 0.662 | 0.069 | Optn          | optineurin  |
| A_55_P1961531  | 0.663 | 0.060 | Tmem194       | transmembrane protein 194   |
| A_52_P493091   | 0.663 | 0.036 | Fmr1          | fragile X mental retardation syndrome 1 homolog                               |
| A_55_P2038452  | 0.665 | 0.034 |               |   |
| A_52_P84353    | 0.665 | 0.072 | Homez         | homeodomain leucine zipper-encoding gene                                      |
| A_55_P2081462  | 0.665 | 0.020 |               |   |
| A_55_P2030883  | 0.666 | 0.030 | Esr1          | estrogen receptor 1 (alpha)   |